Listing and Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (previously presented) A circuit to route signals, comprising:

A plurality of input pins to receive input signals;

A plurality of output pins to transmit output signals;

A plurality of connectors each wired to exactly one of the plurality of input pins and the plurality of output pins;

A plurality of switches, each possessing three poles;

A first plurality of wires each electrically connecting exactly one input pin to a first pole of exactly one switch;

A second plurality of wires each electrically connecting exactly one output pin to a second pole of exactly one switch;

A third plurality of wires each electrically connecting exactly one connector to the common pole of exactly one switch;

A switch matrix to transmit signals from at least one of said input pin to at least one of said output pin.

2. (original) The circuit of claim 1, wherein the circuit is to be housed in a single frame.

3. (original) The circuit of claim 1, wherein said circuit is to receive and transmit video signals.

4. (original) The circuit of claim 1, wherein said circuit is to receive and transmit audio signals.

5. (original) The circuit of claim 1, wherein said circuit is to receive and transmit date signals.

6. (canceled)

7. (previously presented) The circuit of claim 1, wherein said circuit has output pins that can be connected to more than one connector.

8. (original) A method of selectively connecting one of plurality of input receiving wires and one of a plurality of output transmitting wires to one of a plurality of selectable connectors in a signal routing circuit, the method comprising:

retrieving data representing a number of non-selectable input connectors and non-selectable output connectors and selectable input/output connectors from the circuit;

receiving data through an interface from a user representing a number of desired input connectors each to be connected to an input receiving wire;

comparing said number of desired input connectors to the sum of said non-selectable input connectors and a plurality of selectable input/output connectors;

repeating said receiving and comparing until the sum of said non-selectable input connectors and the plurality of selectable input/output connectors equals or exceeds the number of desired input connectors;

calculating the number of available output connectors by adding the number of non-selectable input connectors, non-selectable output connectors, and selectable input/output connectors together and subtracting the number of desired input connectors therefrom;

displaying the number of available output connectors and desired input connectors using a display mechanism;

repeatedly connecting a selectable input/output connector to an input receiving wire until the sum of said non-selectable input connectors and the selectable input/output connectors connected to an input receiving wire equals the number of said desired input connectors;

repeatedly connecting all selectable input/output connector not so connected to an input receiving wire to an output transmitting wire.

9. (original) The method of claim 8, wherein said circuit received and transmits video signals.

10. (original) The method of claim 8, wherein said circuit receives and transmits audio signals.

11. (original) The method of claim 8, wherein said circuit received and transmits data signals.

12. (canceled)

13. (original) The method of claim 8, wherein said circuit has output pins that may be connected to more than one connector.

14. (original) A circuit routing signals, comprising:

a plurality of input pins to receive input signals;

a plurality of output pins to transmit output signals;

a plurality of connectors wired to exactly one of the plurality of inputs pins and one of the plurality of output pins;

a switching apparatus;

a first plurality of wires each electrically connecting exactly one input pin to a first pole of the switching apparatus;

a second plurality of wires each electrically connecting exactly one output pin to a second pole of the switching apparatus;

a third plurality of wires each electrically connecting exactly one connector to a common pole of the switching apparatus;

a matrix circuit to transmit signals in one of from a subset of input pins to a subset of the output pins, from a subset of the input pins to all of the output pins, and from all of the input pins to a subset of the output pins.

15. (cancelled)